



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/382,834	08/25/1999	BRIAN SAMUEL BEAMAN	YO993-028BX	5735

7590 07/17/2002

DANIEL E MORRIS
INTELLECTUAL PROPERTY LAW DEPT
IBM COPORATION
P O BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

NGUYEN, VINH P

ART UNIT	PAPER NUMBER
----------	--------------

2829

DATE MAILED: 07/17/2002

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant No.

09/382,834

Applicant(s)

BEAMAN ET AL

Examiner

VINH P NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The disclosure is objected to because of the following informalities: page 8, line 18, --07/963,364-- should be --07/963,346--; page 9, line 13, --Figure 17—should be --Figure 3--. Furthermore, the detailed description of figure 17 and the drawing of figure 17 are missing.

Appropriate correction is required.

2. Claims 36,45-49,52,55,59-60, 62 and 64 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the limitation of “the flexible elements includes a protuberance at an end thereof” as recited in claim 36, the limitation of “a probe card” as recited in claim 45, the limitation of “a plurality of first substrate adapted to be mounted to a second substrate” as recited in claim 49 and the limitation of “there are a plurality of said second substrates mounted to said first substrate” as recited in claim 52 do not have support in the specification.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

3. Claims 42, 45-48 and 57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 42, it is unclear how the “socket” is interrelated and associated with the first and second substrates in order to be used as alignment feature.. In claim 45, it is unclear how “a

Art Unit: 2829

probe card” is interrelated and associated with “a first substrate”, “a second substrate” and “a plurality of probe elements”. In claim 47, it is unclear what “tip structures” represent. Are they shown in any of drawings?

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of “the flexible elements includes a protuberance at an end thereof” as recited in claim 36 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 29-30,33-35,37-44,45-48,50-51,53-54,56,58,61,63 (insofar as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al (pat # 5,175,496).

As to claims 29-30-35,37,40-44,45-48,50-51,53-54,56,58-59,61,63, Collin et al disclose dual contact beam assembly having a first substrate (24), corresponding to an area of the electronic device (26) to be probed, a second substrate (8), connected to the front surface of the first substrate (24), having a plurality of flexible contact elements (18) for making contact with the electronic device (26). It would have been obvious for one of ordinary skill in the art to recognize that the first substrate is urged against the contact elements (18) such that these contact elements flex and wipe the surface of the electronic component when the flexible contact elements contact the electronic component. It appears that the contact elements (18) are made of wires, therefore, they have original shapes and they substantially compliantly respond when they are withdrawn from contacting the electronic component. Furthermore, the device under test is not given any patentable weight since the device under test is not a part of the invention, therefore the device of Collin et al can be used to test different devices such "integrated circuits" on the wafer or printed circuit board. As to claim 38, it appears that the device of Collin et al has electrical connections between the first substrate and the second substrate in order to perform the test. As to claim 39, it appears that the first substrate (24) would be qualified as "a space transformer" since this term is so broad, it could include many items. As to claim 46, it appears that the probe elements are free standing flexible conductors (18). As to claim 42, it would have been obvious for one of ordinary skill in the art to align the second substrate to the first substrate

by a variety of alignment means in which it could include a socket so that the probing could take place.

7. It appears that the incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

8. In Applicants' remarks filed on 05/07/2002, it appears that Applicants' admission on the record that incorporated Patent No. 5,371,654 supports for the limitations of the instant claims 29-64. Based upon those remarks, those claims should be rejected under 35USC 102 (b).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –


(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2829

10. Claims 29-64 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Beaman et al (Pat # 5,371,654)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829

07/12/2002